

AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions, and listing, of claims in the application:

Listing of Claims:

1. (Currently Amended) An electrophoretic display comprising:
a gate line which extends in a first direction;
a data line which extends in a second direction substantially perpendicular to the first direction;
a first pixel electrode overlapping one of the gate line and the data line; and
a second pixel electrode overlapping the one of the gate line and the data line,
wherein the first pixel electrode and the second pixel electrode overlap a same gate line or data line and are separated by a predetermined distance.
2. (Previously presented) The electrophoretic display of claim 1, wherein a portion of the first pixel electrode and a portion of the second pixel electrode overlap a portion of a width of the data line extending in the second direction between adjacent gate lines.
3. (Previously presented) The electrophoretic display of claim 1, further comprising:
an insulating layer interposed between the data line and one of the first pixel electrode and the second pixel electrode,
wherein the insulating layer has a dielectric constant lower than 4.
4. (Previously presented) The electrophoretic display of claim 1, wherein the data line is made of a metal selected from a group consisting of Mo, Mo alloy, Cr, Ta and Ti.
5. (Previously presented) The electrophoretic display of claim 1, further comprising:
a thin film transistor comprising:
a channel;
a source electrode; and

a drain electrode;
wherein the first pixel electrode and the second pixel electrode are made of opaque material, and
wherein the first pixel electrode and the second pixel electrode overlap the channel of the thin film transistor.

6. (Previously presented) The electrophoretic display of claim 3, wherein the insulating layer is made of a-Si:C:O or a-Si:O:F.

7. (Currently Amended) An electrophoretic display comprising:
a substrate;
a gate line which extends in a first direction; and
a data line which extends in a second direction substantially perpendicular to the first direction;
a thin film transistor comprising:
a channel;
a gate electrode;
a source electrode;
a drain electrode; and
a semiconductor layer,
an opaque layer formed on the semiconductor layer and disposed over the channel of the thin film transistor;
a first pixel electrode overlapping one of the gate line and the data line; and
a second pixel electrode overlapping the one of the gate line and the data line,
wherein the first pixel electrode and the second pixel electrode overlap a same gate line or data line and are separated by a predetermined distance.

8. (Canceled)

9. (Previously presented) The electrophoretic display of claim 7, further comprising:

an insulating layer formed between the data line and one of the first pixel electrode and the second pixel electrode,
wherein the insulating layer has a dielectric constant smaller than 4.

10. (Previously presented) The electrophoretic display of claim 7, wherein the data line is made of a metal selected from a group consisting of Mo, Mo alloy, Cr, Ta and Ti.

11. (Previously presented) The electrophoretic display of claim 7,
wherein the first pixel electrode and the second pixel electrode are made of opaque material, and
wherein the first pixel electrode and the second pixel electrode overlap the channel of the thin film transistor.

12. (Previously presented) The electrophoretic display of claim 9, wherein the insulating layer is made of a-Si:C:O or a-Si:O:F.

13. (Canceled)

14. (Currently Amended) An electrophoretic display comprising:
a substrate; and
a thin film transistor formed on a surface of the substrate, the thin film transistor comprising:
a source electrode and a drain electrode formed on the substrate;
a semiconductor layer formed on the source and the drain electrode;
an insulation layer formed on the semiconductor layer; and
a gate electrode formed on the insulation layer;
a gate line which extends in a first direction;
a data line which extends in a second direction substantially perpendicular to the first direction;
a first pixel electrode overlapping one of the gate line and the data line; and
a second pixel electrode overlapping the one of the gate line and the data line.

wherein the first pixel electrode and the second pixel electrode overlap a same gate line or data line and are separated by a predetermined distance.

15. (Canceled)

16. (Currently Amended) The electrophoretic display of ~~claim 15~~claim 14, further comprising:

an insulating layer formed between the data line and one of the first pixel electrode and the second pixel electrode,

wherein the insulating layer has a dielectric constant smaller than 4.

17. (Currently Amended) The electrophoretic display of ~~claim 15~~claim 14,

wherein the data line is made of a metal selected from a group consisting of Mo, Mo alloy, Cr, Ta and Ti.

18. (Currently Amended) The electrophoretic display of ~~claim 15~~claim 14, wherein an inclination angle of the gate line or the data line relative to the surface of the substrate ranges between about 20 degrees to about 80 degrees.

19. (Previously Presented) The electrophoretic display of claim 16, wherein the insulating layer is made of a-Si:C:O or a-Si:O:F.

20. (Currently Amended) An electrophoretic display comprising:

a gate line which extends in a first direction;

a data line which extends in a second direction substantially perpendicular to the first direction;

a first pixel electrode overlapping one of the gate line and the data line;

a second pixel electrode overlapping the one of the gate line and the data line;

a common electrode; and

a plurality of micro-capsules,

wherein each of the microcapsules of the plurality of microcapsules comprises electric ink containing a plurality of color pigment particles,

wherein a color of the plurality of color pigment particles is at least one of red, green, blue, cyan, yellow, magenta, black and white, and

wherein the first pixel electrode and the second pixel electrode overlap a same gate line or data line and are separated by a predetermined distance.

21. (Previously presented) The electrophoretic display of claim 20, wherein a portion of the first pixel electrode and a portion of the second pixel electrode overlap a portion of a width of the data line extending in the second direction between adjacent gate lines.

22. (Previously presented) The electrophoretic display of claim 20, further comprising:
an insulating layer formed between the data line and the first pixel electrode and the second pixel electrode,

wherein the insulating layer has a dielectric constant lower than 4.

23. (Canceled)